

By: Carly Epstein

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At All Learners Network (ALN) we work with districts and schools to develop systems and communities that enable all educators to promote and actualize math equity and inclusion for all students.

In order to create these systems we need to support and empower all educators. A great place to do this is during faculty meetings. We recommend using three practices during these meetings to empower educators to improve content knowledge, improve instructional practices, and build collective efficacy among teachers.

The three practices we recommend using are:

- 1. Doing Math Together
- 2. Using Student Work
- 3. Building Culture

Let's take a closer look at the benefits of each practice.

#1 Doing Math Together

Every single day students walk into our classrooms and we expect them to be vulnerable. Learning new things means taking risks and testing out ideas. Being open to receiving new information, and potentially not understanding right away, requires vulnerability.

As professional educators, we have to experience that same vulnerability. We can



practice that same vulnerability when we work to improve our practices, increase our content knowledge, strengthen our pedagogy, and consider shifts in the overall culture in which students experience math education.

By engaging in rich math tasks during faculty meetings you are encouraging your educators to look at the tasks through the lens of the students. This allows teachers to explore different models and strategies that kids might use, which in turn build the teachers' own content knowledge. The goal is to hear teachers say things like "Oh, I've never seen a kid do that before" or "How do students use that model or strategy."

In order to select the tasks that are going to be most beneficial you are going to want to leverage your middle level leadership. Your middle level leadership can be your teacher leaders, coaches, interventionists, and/or special educators. They will be able to help select tasks that will apply to the work your educators are doing in the classroom.

When engaging with rich tasks, use the Problem Introduction Protocol. This will be a great way to support instructional moves teachers can make to provide more access to all students when they bring these tasks from the meeting to their own classroom. As educators move into solving these problems, encourage them to solve the problem in multiple ways. Partner their flexible problem solving with questions to anticipate student thinking - Where might students be successful? What models and strategies could they use? Where might they get stuck? What questions can we prepare to support student thinking? By discussing these questions as a group educators will be able to determine dynamic ways to respond to further a student's thinking rather than just providing them with a path forward to a right answer.

#2 Using Student Work

When thinking about using student work at faculty meetings you can create opportunities for teachers, special educators and interventionists to collaborate. We likely all know students who spend some of their time in the classroom and some time with interventionists or special educators. We obviously can't separate a child and put them in more than one place, but we are often separating their instruction.

By including special educators, interventionists, as well as classroom teachers, and coaches in your faculty meetings you are creating a space where they can have conversations about the same student they all provide services to. When all educators are on the same page about what a student needs, it narrows the focus for instruction. Interventionists or special educators can create tighter connections between their intervention or specialized models and strategies and what is occurring in first instruction and classroom teachers can support access to content through the same shared models and strategies.



The best way to be aligned on what a student, or a group of students, really needs is to look at student work and use what you see to determine instructional next steps. When doing this it is important to understand what can be used as an assessment for learning and what the formative assessments are that are happening every day in their classrooms

When looking at student work we want to think about - What are they showing us? What are they telling us?

It is important to not use the work to create tiers, but instead to group student work by the thinking that is demonstrated even when done with various degrees of success. Check out our ALN Work Sort Protocol for more on this.

When we give teachers time to engage with student work it also builds their content knowledge because teachers are having deeper conversations about models and strategies. What strategies are kids using - the actions kids are applying to their models? What are they doing? What patterns are we noticing? Are there some critical strategies that nobody's using?

If we want educators to utilize timely instructional data and make informed decisions, they have to be looking at the actual day-to-day student work. By looking at and sorting student work, we create collective ownership of what kids are showing us and allow teachers to use and share their expertise with one another to create effective instructional next steps.

#3 Building Culture

The adults in your schools and districts have likely had very negative experiences with math. I'm sure we all have had colleagues that are petrified of math. Maybe this is because they were left out of their classroom, or they were tracked really early in their education. Their math identity is "I'm terrible at math."

For better or worse, the math identities educators hold become part of the culture of their learning environments. If during faculty meetings you are creating a space where educators can productively struggle together while engaged in math tasks or activities and finding success with math that brings joy, the educators in the room will experience the shift in culture that we hope the students will get to experience as well.

This culture shift is incredibly important for students in terms of access and creating humanizing experiences. Rather than using the methods we learned growing up, mainly memorization and procedure, we want students to be engaged in their math education. We want students to be captivated by problem solving and tapping into the curiosity that will lead them to the feeling of joy once they have figured it out.

A great way to encourage students to take on an active role is to ensure that they all have access and feel a sense of belonging. At ALN we encourage teachers to start classes with Launch, or number sense, routines. These provide accessible opportunities for all students to see themselves as mathematicians. These might be images or number strings that we work on for the first five to 10 minutes of a math block. Our goal with these routines is for students to have multiple access points through dynamic routines to experience math collaboratively and productively at the start of every math class.

Another way to help create this environment is math games. If we think about the shift in culture we want to create first at the educator level, and then at the student level, math games are much more likely to make this shift than a worksheet or direct instruction as games offer opportunities for relaxed curiosity.

Are you able to reframe part of your faculty meetings to be professional learning experiences? As long as you are able to provide an outcome that teachers can put into practice in their classroom right away you are on your way to creating a stronger community and better culture for your students.

What Now? Scan the QR code and scroll to the bottom of the post for links to next steps

- 1. Check out the recording of our 2024 workshop Leveraging Faculty Meetings for Math Improvement.
- 2.Join All Learners Online (ALO) for access to Launch routines to use in the classroom.
- 3. Bring All Learners Network (ALN) into your school or district for embedded professional development.

